10/532 919 (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization

International Bureau



- 1 (1881)

(43) International Publication Date 21 May 2004 (21.05.2004)

PCT

(10) International Publication Number WO 2004/042698 A1

(51) International Patent Classification⁷:

G10L 15/20

(21) International Application Number:

PCT/IB2003/004727

(22) International Filing Date: 24 October 2003 (24.10.2003)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 102 51 113.6

2 November 2002 (02.11.2002)

- (71) Applicant (for DE only): PHILIPS INTELLECTUAL PROPERTY & STANDARDS GMBH [DE/DE]; Steindamm 94, 20099 Hamburg (DE).
- (71) Applicant (for AE, AG, AL, AM, AT, AU, AZ, BA, BB, BE, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CY, CZ, DK, DM, DZ, EC, EE, EG, ES, FI, FR, GB, GD, GE, GH, GM, GR, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, SZ, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW only): KONINKLIJKE PHILIPS ELECTRONICS N.V. [NL/NL]; Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).

- (72) Inventor; and
- (75) Inventor/Applicant (for US only): KOOIMAN, Albert [NL/DE]; c/o Philips Intellectual Property & Standards GmbH, Weisshausstr. 2, 52066 Aachen (DE).
- (74) Agent: MEYER, Michael; Philips Intellectual Property & Standards GmbH, Weisshausstr. 2, 52066 Aachen (DE).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHOD FOR OPERATING A SPEECH RECOGNITION SYSTEM

(57) Abstract: A method for operating a speech recognition system is described in which a speech signal (S1) of a user is detected and analyzed so as to recognize speech information contained in the speech signal (S₁). The speech recognition system determines a reception quality value (So) or a noise value which represents a current reception quality. The speech recognition system is switched over to a mode of operation which is less sensitive to noise and/or outputs an alert signal (Sw) to the user when the reception quality value (S₀) drops below a given reception quality threshold or when the noise value exceeds a noise threshold. An appropriate speech recognition system is also described.

Internal Jica

27 APR 2005

PCT/IB 03/04727

A.	CLASSII	FICATION	OF SUE	JECT	MATTER
IF	C 7	G10L	15/2	0	

According to international Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

 $\begin{array}{ll} \mbox{Minimum documentation searched (classification system followed by classification symbols)} \\ \mbox{IPC 7} & \mbox{G10L} \end{array}$

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, INSPEC, WPI Data, PAJ

	ENTS CONSIDERED TO BE RELEVANT	
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 00/72307 A (BOVES LODEWIJK WILLEM JOHAN; KONINKL KPN NV (NL); DRENTH EGBERT WILLE) 30 November 2000 (2000-11-30) abstract page 2, line 38 - page 3, line 9	1,4,6, 8-10
X	US 6 336 091 B1 (POLIKAITIS ET AL) 1 January 2002 (2002-01-01) abstract; figure 2 column 2, lines 28-54	1,2,4-10
X	US 2002/019734 A1 (BARTOSIK HEINRICH FRANZ) 14 February 2002 (2002-02-14) abstract paragraphs '0007!, '0012!, '0013!	1,2,7-10

Further documents are listed in the continuation of box C.	Patent family members are listed in annex.
Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but published on or after the international filling date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filling date but later than the priority date claimed Date of the actual completion of the international services.	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. "&" document member of the same patent family
Date of the actual completion of the international search 23 January 2004	Date of mailing of the international search report 04/02/2004
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL – 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer Quélavoine, R

Internal Silication No PCT/IB 03/04727

		PCT/IB 03	3/04727
	ation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category °	Citation of document, with Indication,where appropriate, of the relevant passages		Relevant to claim No.
X	EP 1 085 501 A (CANON KK) 21 March 2001 (2001-03-21) abstract; figure 2 paragraph '0051!		1,2,4-6, 9,10
Ρ, Χ	PATENT ABSTRACTS OF JAPAN vol. 2002, no. 12, 12 December 2002 (2002-12-12) & JP 2002 244696 A (KENWOOD CORP), 30 August 2002 (2002-08-30) abstract		1,2,7,9, 10
γ,χ	US 6 505 155 B1 (VANBUSKIRK ET AL) 7 January 2003 (2003-01-07) abstract; figure 4a		1,7-10
•			
	•		
,			
	·		
), U
	·		

INTERNATIONAL SEARCH REPORT

on patent family members

Internatio	ilication No	
PCT/IB	03/04727	

	atent document d in search report		Publication date		Patent family member(s)		Publication date
WO	0072307	Α .	30-11-2000	NL AU WO EP	1012148 4403100 0072307 1194922	A A1	28-11-2000 12-12-2000 30-11-2000 10-04-2002
US	6336091	B1	01-01-2002	GB	2346001	A ,B	26-07-2000
US	2002019734	A1	14-02-2002	CN WO EP-	1389059 0205537 1299996	A1	01-01-2003 17-01-2002 09-04-2003
EP	1085501	A	21-03-2001	JP EP	2001086239 1085501		30-03-2001 21-03-2001
JP	2002244696	Α	30-08-2002	NONE			
· US	6505155	В1	07-01-2003	NONE			